NEA

Research Bulletin

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A Statistical Picture of Our Schools

34.6 million pupils plus 1.4 million teachers equals public education—the nation's largest enterprise

THE RESEARCH Division's annual estimate of statistics for the current school year highlights the downward trend in the number of school districts, and upward trends in all other quantitative measures of schools—enrollments, size of the instructional staff and average salaries, and revenues and expenditures for the nation's public elementary and secondary schools:

- School districts: 45,393—down 7.5 percent from 1957-58
- Pupil enrollment: 34,641,627—up 3.9 percent over 1957-58
- Instructional staff: 1,395,940—up 4.3 percent over 1957-58
- Average salary of instructional staff: $4935—up 4.6 percent over 1957-58
- Current expense per pupil in ADA: $340—up 4.9 percent over 1957-58
- Revenue receipts: $12.1 billion—up 8.4 percent over 1957-58.

The total expenditure (current expense, interest, and capital outlay) for the nation's public elementary and secondary schools for the school year 1958-59 is estimated at $14.4 billion—an increase of 9.6 percent over 1957-58. Current expense (mostly for instructional purposes) is estimated at $10.7 billion, an increase of 9.9 percent over 1957-58.

Another high light of this school year is the entrance of the forty-ninth state school system—Alaska. Though small compared with most of the other systems, the accomplishments of the Alaska schools have been spectacular.

SCHOOL DISTRICTS

The number of school districts in the United States declined from 49,071 in 1957-58 to 45,393 in 1958-59. This shrinkage is important from the point of view of potential school improvement. It represents consolidation of districts to pool fiscal and human resources to provide an adequate educational program.

PUPIL ENROLLMENTS

For the past 10 years, enrollments have increased at an average of about 1 million pupils per year. In the current school year the elementary schools have four pupils for every three enrolled in 1950-51; the secondary schools have 10 pupils for every seven enrolled in 1950-51. Enrollments have increased 40.5 percent since 1948-49 to a total of 34,641,627. Of this total, 24,340,919 or 70.3 percent are elementary-school pupils and 10,300,708 or 29.7 percent are secondary-school pupils. The proportion of secondary-school pupils to the total number of pupils is the largest in public school history.

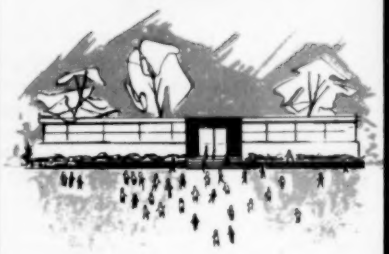
SIZE OF INSTRUCTIONAL STAFF

Over the past 10 years the instructional staff has increased 50.3 percent to a total of 1,395,940 for the school year 1958-59. The largest growth has come in the supervisory and auxiliary instructional staff. This group (principals, supervisors, librarians, guidance personnel, etc.) has increased 53.8 percent since 1950-51. Over the same period (1950-51 through 1958-59) secondary-school classroom teachers have increased 49.2 percent compared with an increase of 33.9 percent in the staff of elementary-school classroom teachers.

The total number of classroom teachers is 1,291,929. Classroom teachers are 92.5 percent of the total instructional staff. Principals and supervisors total 78,940, or 5.7 percent of the instructional staff. Other instructional staff members (librarians, guidance personnel,

For details see: *Estimates of School Statistics, 1958-59*. Research Report 1958-R6. December 1958. 30 p. 25¢.

1 PUBLIC-SCHOOL ENROLLMENTS, 1948-49 THROUGH 1958-59

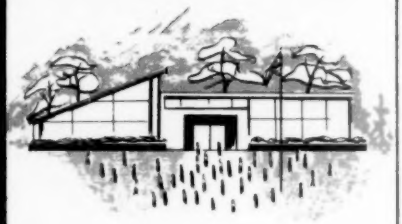


Public-school enrollments—Elementary

School year			
1948-49	18,000,000	1953-54	21,029,384
1949-50	18,612,408	1954-55	21,774,216
1950-51	19,010,554	1955-56	22,519,049
1951-52	19,713,202	1956-57	22,986,381
1952-53	20,121,866	1957-58	23,560,341
	1958-59	24,340,919	

Public-school enrollments—Secondary

School year			
1948-49	6,653,383	1953-54	7,887,319
1949-50	6,523,028	1954-55	8,191,836
1950-51	6,783,956	1955-56	8,622,289
1951-52	6,998,454	1956-57	9,282,078
1952-53	7,410,569	1957-58	9,776,108
	1958-59	10,300,708	



Public-school enrollments—Total

School year	
1948-49	24,653,383
1949-50	25,185,436
1950-51	25,794,510
1951-52	26,711,656
1952-53	27,532,435
1953-54	28,916,703
1954-55	29,966,052
1955-56	31,141,338
1956-57	32,268,459
1957-58	33,336,449
1958-59	34,641,627

remedial reading teachers, etc.) total 25,071, and are 1.8 percent of the instructional staff. The latter group is growing faster than the other components of the instructional staff (i. e., teachers, principals, and supervisors); it has increased in number 2.6 times since 1954-55.

AVERAGE SALARY OF INSTRUCTIONAL STAFF

The average salary of the instructional staff for 1958-59 is estimated at $4935, an increase of 4.6 percent over the average salary of $4720 estimated for 1957-58.

The net gain in average salary is partly offset by increases in the cost of living. In dollar amounts the average salary of the instructional staff was $2846 in 1948-49 and $4935 in 1958-59—an increase of 73.4 percent. The 1958-59 average salary was equal to $3990 in terms of purchasing power of the dollar of 1947-49.

Throughout the United States the differences in teaching salaries are great. The average salary paid the instructional staff in the Far West ($5992) is one and one-half times as large as the average salary paid in the Southeast ($3882).

AVERAGE SALARY OF CLASSROOM TEACHERS

For 1958-59 the average salary of classroom teachers is estimated at $4775, or 97 percent of the average salary of the total instructional staff. The average annual salary of elementary-school classroom teachers is estimated at $4575. The average annual salary of secondary-school classroom teachers is estimated at $5110. For the current school year:

- 17.5 percent of the classroom teachers are paid less than $3500.
- 34.4 percent are paid $3500 to $4499.
- 27.9 percent are paid $4500 to $5499.
- 20.2 percent are paid $5500 or more.

EMERGENCY TEACHERS

Persons employed with less than full certification by the state—emergency teachers—are estimated at 95,721 for 1958-59. Emergency teachers differ greatly from state to state with respect to the academic and other qualifications required for this type of certificate. Of the total number of emergency teachers, 57 percent have less than 4 years of college.

The emergency teachers are largely concentrated in the elementary schools and in rural school districts. No improvement in the ratio of emergency teachers to the total number of classroom teachers has been evident since 1950-51.

- In 1950-51, the ratio stood at one emergency teacher in every 12 classroom teachers.
- For 1958-59, the ratio is estimated at one emergency teacher in every 13 classroom teachers.

By 1958-59, the total number of emergency teachers employed (95,721) slightly exceeded the number employed in 1949-50 (95,146).

TOTAL EXPENDITURES

The total expenditures for the school year 1958-59 for current expense, capital outlay, and interest are estimated at $14,373,638,000. This amount represents an increase of 9.6 percent over the revised estimate of total expenditures of $13,109,662,000 for 1957-58.

The total expenditures per pupil enrolled for 1958-59 is estimated at $415—an increase of 5.6 percent over last year's figure of $393 per pupil enrolled.

CURRENT EXPENSE

Current expense for 1958-59 is estimated at $10,730,045,000, an increase of 9.9 percent over the school year 1957-58. Current expense for public elementary and secondary schools has increased 152.6 percent since 1948-49. Gains over the past 10 years have averaged 9.8 percent a year.

The expenditure per pupil in average daily attendance (ADA) for 1958-59 is estimated at $340. For the past three years the increase per pupil in ADA per year has been estimated at about $20. Since 1948-49 the current expense per pupil in ADA has increased from $197.65 to an estimated $340, a gain of 72 percent. The median of the current expenditures per pupil in ADA of the school systems of the 49 states and the District of Columbia is $332.

CAPITAL OUTLAY AND INTEREST

The estimate of expenditures for capital outlay and interest for 1958-59 is $3,643,593,000—an increase of 8.9 percent over the revised estimate of $3,347,240,000 for 1957-58.

It is important to note here that within this method of accounting for school costs the amounts of the outlays for capital expenditures for buildings, sites, vehicles, and items of durable equipment are charged to the year in which the expenditures are made rather than spread over the lifetime of the building or other item. Interest is charged to the fiscal year in which the interest is paid.

Expenditures for capital outlay and interest amounted to 25.3 percent of the total expenditures estimated for 1958-59 compared with 18.7 percent 10 years ago in 1949-50.

REVENUE RECEIPTS

Revenue receipts are estimated at $12,068,540,000. In addition, the school

districts have nonrevenue receipts, mostly from borrowing, of $2,759,010 thousand.

For the school year 1958-59, the federal, state, and local governments shared the financing of schools in the following amounts:

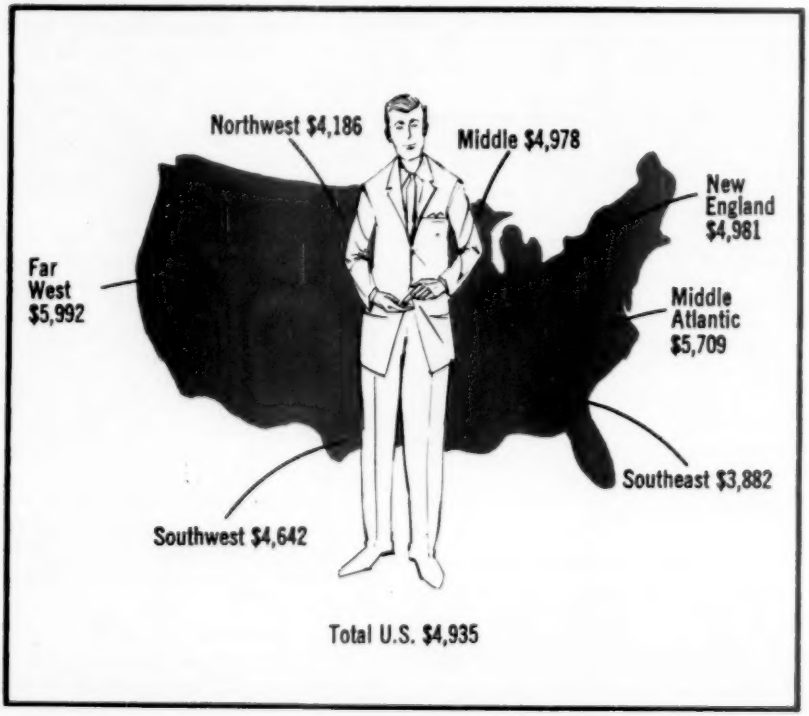
- A federal share of $427,377,000—up 6.3 percent from last year.
- The 49 state governments' contribution of $4,789,530,000—up 7.8 percent from last year.
- The local tax jurisdictions' contribution of $6,851,633,000—up 9.0 percent from last year.

In the 8 years since 1950-51 there has been some fluctuation from year to year but little change in the share of school revenue receipts of the three levels of government. In 1950-51, the federal government contributed 3.1 percent of the total revenue receipts; the states contributed 39.7 percent; and the local school districts contributed 57.2 percent. In 1958-59, the federal share was 3.5 percent of the total revenue receipts; the states' share was 39.7 percent; and the local share was 56.8 percent.

Revenue raised locally for school purposes comes largely from property tax receipts.

Over the past 10 years revenue receipts have increased 145.2 percent at an average annual gain of 9.4 percent.

2 AVERAGE SALARIES OF INSTRUCTIONAL STAFF, BY REGIONS, 1958-59



3 REVENUE RECEIPTS, BY SOURCE, 1948-49 THROUGH 1958-59

Year	Total	Federal	State	Local
1948-49	$4.9	$0.1	$1.9	$2.9
1949-50	5.4	0.2	2.2	3.1
1950-51	5.9	0.2	2.4	3.4
1951-52	6.4	0.2	2.5	3.7
1952-53	7.3	0.2	2.6	4.5
1953-54	7.9	0.4	2.9	4.6
1954-55	8.5	0.2	3.2	5.1
1955-56	9.4	0.3	3.6	5.5
1956-57	10.2	0.4	4.0	5.7
1957-58	11.1	0.4	4.4	6.3
1958-59	$12.1	$0.4	$4.8	$6.9

Nonrevenue receipts, mostly from borrowing are estimated at $2,759,010 thousand for 1958-59—a gain of 9.3 percent over the figure of $2,523,958,000 for 1957-58.

THE NEWEST STATE SCHOOL SYSTEM

This is the first year that figures for the forty-ninth state school system have been included in the totals for the United States. A review of the statistics of the Alaska state school system for 1958-59 follows:

- 40,000 pupils attend the public schools, operated by 29 school districts.
- 1775 instructional staff members are paid an average salary of $6500.
- 1690 classroom teachers are paid an average salary of $6400.
- $20.5 million in revenue receipts were collected with the state contributing 50 percent, the federal government contributing 15 percent, and the local district contributing 35 percent.
- Schools cost $17.5 million for current expense, and $3 million for capital outlay.
- Current expense per pupil in ADA amounts to $520.

SUMMARY

Almost one-fifth of the nation's total population is enrolled in the public elementary- and secondary-school systems of the 49 states and the District of Columbia. The instructional staff is the largest of the nation's professional occupational groups. Government expenditures for public schools are larger than for any other purpose except national defense. Statistics for the current school year again illustrate the vast scope of the nation's public school enterprise.

Teachers in 34 states are now covered by

STATE MINIMUM-SALARY LAWS

AT THE beginning of the school year 1958-59, public-school teachers in 34 states, Hawaii, and Puerto Rico were employed under provisions of state minimum-salary laws. The first of these laws was passed in 1882 by West Virginia; the latest, in 1957 by Arkansas.

The greatest impetus for enactment of these measures came during and immediately following World Wars I and II. The years of adoption may be seen in Illustration 1.

Indiana, Maryland, North Dakota, Pennsylvania, West Virginia, and Hawaii have operated under these laws for over half a century. Only two states, Nevada and Utah, have rescinded minimum-salary laws without later re-enactment. Ohio and Mississippi, on the other hand, re-enacted such laws after abandoning earlier efforts in this direction.

GENERAL PATTERN

The state minimum-salary laws set a minimum standard or floor below which local boards of education cannot go in paying public-school teachers. In all these states, local school districts are free to pay higher salaries than the law requires. Many of the statutes contain express language to this effect, but where not so written, authority to do so is implicit.

In the main, the statutes specify in dollar amounts, either annually or monthly, the minimum salaries required to be paid to teachers in various classifications. In four states, however—Georgia, North Carolina, Tennessee, and Virginia—the legislatures authorize or direct the state boards of education to promulgate salary schedules.

COMPLIANCE PROVISIONS

In most states, compliance with the provisions of the minimum-salary law is mandatory. A few state laws have optional compliance features in that school districts receiving state aid must not pay less than the statutory minimums. This leaves districts free to pay lower salaries if they waive the benefits of state aid.

Enforcement provisions are stringent in some states. School-board members in Oregon become personally liable for paying the salaries if they contract with teachers for less than the legal amounts. In Idaho, any officer or employee who withholds the full salary required by law is guilty of a misdemeanor. The West Virginia statute authorizes mandamus proceedings to compel local boards to comply with the minimum-salary requirements.

SALARY LAWS AND STATE AID

An analysis of the relationship between the legal salary standards and state aid plans produces no single overall pattern. What does emerge may be generalized in this way:

- There may be no direct relationship between the minimum-salary statute and the state aid statute.
- In some states, amounts needed for the payment of minimum salaries are one factor in computing the cost of the foundation program, used as the basis for the state aid grant in each local school unit.
- In some states, compliance with the salary law is a condition for participation in the state equalization plan, but the minimum-salary costs play no part in computing the amount of state aid.

PERSONNEL COVERED

In general, the minimum-salary laws apply to classroom teachers who meet certification requirements. Common

For further details see: *State Minimum-Salary Laws and Goal Schedules for Teachers, 1958-59.* Research Report 1958-R5. December 1958. 45 p. 25¢.

1 YEAR OF ADOPTION OF A MINIMUM-SALARY LAW FOR TEACHERS

Before 1915
- West Virginia, 1882
- Hawaii, 1896
- Indiana, 1901
- Pennsylvania, 1903
- Maryland, 1904
- North Dakota, 1905
- Rhode Island, 1909
- Iowa, 1913

1915-1924
- Vermont, 1915
- Wisconsin, 1915
- Kentucky, 1918
- Massachusetts, 1918
- Delaware, 1919
- New Jersey, 1919
- New York, 1919
- Oregon, 1919
- Colorado, 1921
- North Carolina, 1923

1925-1934
- Tennessee, 1925

1935-1944
- California, 1937
- Georgia, 1937
- Washington, 1937
- Alaska, 1939
- Oklahoma, 1939
- Maine, 1943
- Puerto Rico, 1944

1945-1954
- South Carolina, 1945
- Texas, 1945
- Illinois, 1946
- Virginia, 1946
- Idaho, 1947
- Louisiana, 1948
- Ohio, 1951
- Mississippi, 1953

1955 and after
- Florida, 1955
- Arkansas, 1957

provisions either expressly exclude or else specify lower salaries for teachers with provisional or emergency certificates. At least five states designate the minimum salaries of substitute teachers also.

Minimum salaries for one or more groups other than classroom teachers are spelled out in about half the state laws. Most frequently recognized are superintendents, principals, supervisors, vocational teachers, and school nurses. In Delaware, the law is unique in that it contains minimum-salary provisions for school secretaries and custodial staff.

TYPES OF REQUIREMENTS

Basically there are three types of minimum-salary requirements:

- A minimum-salary *schedule* which gives recognition to preparation and requires increments for experience.
- Minimum salaries fixed on the basis of *two or more flat rates*, according to preparation level, with no credit for experience.
- A minimum salary fixed as a *single flat rate* amount.

Those favoring the minimum schedule type of law believe that the mandatory increments are necessary to guarantee recognition for experience to all teachers. Also, the schedule provides a useful device for making a realistic calculation of the cost of a minimum program. Those preferring the flat rates believe that a state salary schedule stifles local initiative.

Legislatures may shift from one type of salary requirement to another. Six such changes have been noted in the past four years, but not all in the same direction. Moving in the direction of salary schedules were the laws in New Jersey, Rhode Island, and Vermont. New York changed from a complete to a partial schedule. Moving toward flat rates were the Ohio and Oregon statutes.

The types of minimum-salary requirements under which the states operated as of September 1958 are depicted in Illustration 2.

Most prevalent is the law which prescribes a minimum schedule based on preparation and experience. Twenty-four of the 36 minimum-salary laws are of this type. In this group are four states in which partial rather than full schedules are to be found. These are

2 STATE MINIMUM-SALARY REQUIREMENTS FOR TEACHERS, BY TYPE, SEPTEMBER 1958

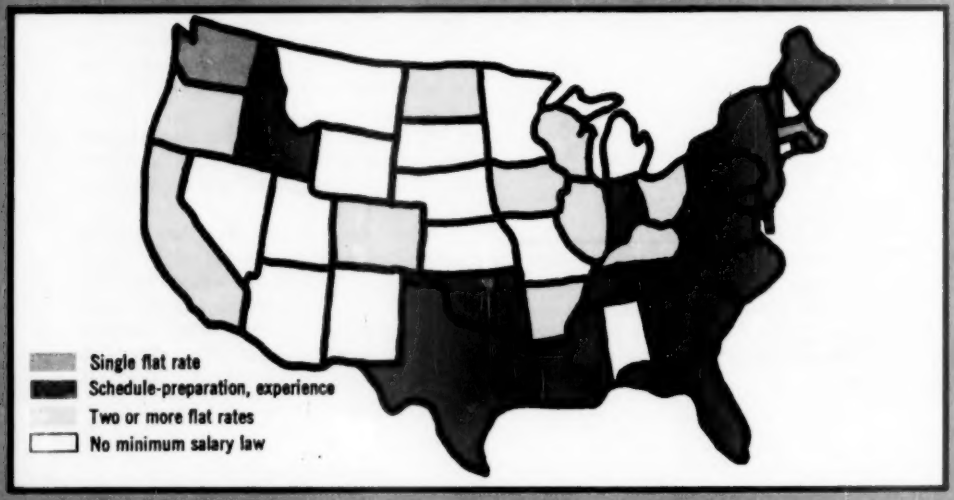
Florida, New York, Rhode Island, and Vermont. The legal requirements in these states do not specify the number or amounts of increments to be given although the minimum amounts required to be paid to experienced teachers are clearly indicated.

It is noteworthy that all but two of the minimum-schedule states are located in the East or in the South. The two are Alaska and Idaho. Hawaii and Puerto Rico adhere to minimum schedules also.

Of the remaining 12 minimum-salary states, 10 prescribe minimum flat-rate salaries varying with preparation. Two states, Massachusetts and Washington, have single flat rates. Absence of minimum-salary legislation is more characteristic of the Midwest and West.

Within the three types of salary requirements that have been described, considerable variations are to be found from state to state. Striking differences appear in:

- The levels of preparation on which minimum salaries are predicated
- The amounts of salary required at comparable preparation levels
- The number and size of the experience increments required
- The types of professional school personnel which these laws embrace, other than classroom teachers.



3 LEGAL MINIMUM SALARIES FOR BEGINNING TEACHERS, SEPTEMBER 1958

Bachelor's degree

$4,000-4,999

Alaska	$4,650
California	4,200
New York	4,000

$3,000-3,999

New Jersey	$3,800
Oregon	3,700
Delaware	3,600
Massachusetts	3,600
Pennsylvania[a]	3,600
Illinois	3,400
Louisiana[a]	3,400
Vermont	3,400
Colorado	3,380
Texas	3,204
Maryland	3,200
Rhode Island	3,200
Hawaii	3,120
Florida	3,060
Maine	3,000
Ohio	3,000
Oklahoma	3,000

$2,000-2,999

Georgia	$2,900
North Carolina	2,799
West Virginia	2,790
Indiana	2,727
Arkansas	2,700
Mississippi	2,650
Virginia[a]	2,650
Kentucky	2,610
Wisconsin	2,600
Tennessee	2,450
Puerto Rico[a]	2,400
Washington	2,400
Idaho	2,300

Under $2,000

North Dakota	$1,350
South Carolina	1,107
Iowa	810

Master's degree

$4,000-4,999

Alaska	$4,800
New York	4,300
California[b]	4,200
Delaware	4,000
New Jersey	4,000
Oregon	4,000

$3,000-3,999

Vermont	$3,700
Illinois	3,600
Louisiana[a]	3,600
Massachusetts[b]	3,600
Pennsylvania[a]	3,600
Florida	3,465
Texas	3,429
Hawaii	3,420
Ohio	3,400
Colorado[b]	3,380
Georgia	3,200
Maine	3,200
Maryland[b]	3,200
Oklahoma	3,200
Rhode Island[b]	3,200
North Carolina	3,177
West Virginia	3,060
Arkansas	3,000

$2,000-2,999

Kentucky	$2,880
Mississippi	2,875
Puerto Rico[a]	2,760
Indiana	2,727
Tennessee	2,720
Virginia[a,b]	2,650
Wisconsin[b]	2,600
Idaho	2,500
Washington[b]	2,400
South Carolina	2,268

Under $2,000

North Dakota[b]	$1,350
Iowa[b]	810

a Adopted salary, not fully in effect in the 1958-59 school year.

b No separate minimum salary is provided for the master's degree. The beginning salary for the bachelor's degree is shown.

MINIMUM SALARIES

Of greatest interest, perhaps, are the amounts of minimum salaries fixed for beginning teachers by these laws, and the degree to which the state legislatures are responsive to needed upward revisions to keep pace with current economic trends. During the 1957 and 1958 legislative sessions, 23 states and territories increased their minimum-salary requirements. Eight other states revised their provisions during 1955 and 1956. In only four states, Iowa, North Dakota, Washington, and Wisconsin, have the laws remained unchanged so long as to become obsolete. Information from the state departments of education in these four states reveals that minimum salaries actually paid are much higher than the legal requirements still carried on their statute books.

Extremely wide variations exist in the required minimum salaries for both beginning and experienced teachers. The legal minimum salaries for beginning teachers at two levels of training are presented in Illustration 3.

On the whole, the salary figures indicate that despite the recent upward revisions, the legally required minimums are extremely low in all classifications.

The median of the minimum salaries for beginning teachers with a *bachelor's degree* is $3000. Only three of the 36 minimum-salary states and territories provide for salaries as high as $4000 for this group. For experienced teachers in this group, the median is $4250.

Only six states require salaries of $4000 or more for beginning teachers holding *master's degrees*. For experienced teachers in this classification, the median is $4750, with but 10 states requiring salaries as high as $5000.

It is encouraging to note that in the past two years, legislative changes have shortened the number of required increments in several states. At the start of the 1958-59 school year, for teachers with master's degrees, the median requirement was 11 increments.

Six states—Delaware, Florida, Oklahoma, South Carolina, Tennessee, and West Virginia—and in addition, Puerto Rico, give recognition to teachers with doctor's degrees through higher salary provisions. The minimum salaries for this preparation level range from $2979 to $4800 for beginning teachers and from $3456 to $6700 for experienced teachers.

ACHIEVING SALARY STANDARDS OUTSIDE MINIMUM-SALARY LAWS

At present, 15 states have no minimum-salary laws. There exist in some of these states other legal provisions which affect salary levels and provide incentive to local boards to engage better qualified teachers. The device of distributing part or all of the state aid to school districts according to the certification or preparation level of the teachers employed is used in several states. Alabama, Kansas, Minnesota, and Missouri are representative of provisions of this kind.

State education associations, too, through the adoption of goal schedules for the guidance of local teachers associations and boards of education, exert an important influence toward upgrading teachers' salaries. In the past two years, 21 state education associations, including 10 from states not governed by minimum-salary laws, adopted or revised their salary goal schedules in keeping with current needs. At least five of the associations subscribe to the NEA salary goals.

School Admission and Promotion

Minimum age of admission to grade 1 is usually 5 years, 8 or 9 months

SHOULD age be the sole criterion for school admission? Parents and teachers sometimes have different ideas about the age at which a child should start to school. They also have mutual problems about promotion and nonpromotion. Today's heightened interest in the schools and in their administrative policies has intensified these concerns. In the light of this current interest, two Educational Research Service circulars are of special significance; they deal with age of admission to kindergarten and first grade, and promotion policies and rates.

The conclusions are based on an 83-percent return to a questionnaire sent to all urban school districts of 100,000 or more population, to more than 400 urban districts between 2500 and 100,000 population, and to a selected group of county and suburban school systems.

Among the major findings are the following facts:

- Most systems admit pupils to kindergarten at 4 years, 8 months, or 4 years, 9 months.
- The most usual minimum age set for admission to first grade is 5 years, 8 to 9 months, although the range extends from 5 years, 3 months, to 6 years, 8 months.
- Some trend is noticeable toward raising the minimum age for admission.
- In a clear and growing majority of school systems, pupils are promoted only once each year.
- The promotion rate for grade 1 is somewhat lower than that for grades 2 and 3; it is higher in grade 1 for girls than for boys.

ADMISSION TO KINDERGARTEN

Despite the wide acceptance in principle of a kindergarten program prior to entry into first grade, slightly more than one-fifth of the school systems replying to the questionnaire reported that their instructional program still does not include a kindergarten. If the survey had included rural areas, the percentage not having a kindergarten would have been much larger.

Of systems having kindergartens, 61 percent indicated that they admit pupils at either 4 years, 8 months, or 4 years, 9 months. The youngest age listed was 4 years, but one school system reported that the child must be over 5 to be admitted to kindergarten. Less than 4 percent set the age under 4 years, 7 months.

ADMISSION TO FIRST GRADE

Six percent of the respondents indicated that there was no established minimum age for admission to first grade. Many of these systems, however, require the child to have kindergarten experience before being admitted to first grade, and they do list a minimum-age requirement for kindergarten attendance.

Pupils are admitted to grade 1 at 5 years, 9 months, in 27 percent of the systems reporting. A minimum age of 5 years, 8 months, was reported by 23 percent of the respondents.

Birth certificates or other evidence of age are almost universally required.

EXCEPTIONS TO THE RULES

Either in compliance with a state law forbidding exceptions to admission-age rules or with established local policy, more than one-third of the school systems reporting make no exceptions. When this segment of school systems is added to that which makes exceptions only for pupils transferring during the school year, a total of 77 percent is found to have a policy of rigid enforcement of minimum-age limits.

For further details see: *Admission Policies for Kindergarten and First Grade.* ERS Circular No. 3, 1958. April 1958. 49 p. $1.50. *Pupil Promotion Policies and Rates of Promotion.* ERS Circular No. 5, 1958. June 1958. 55 p. $1.50.

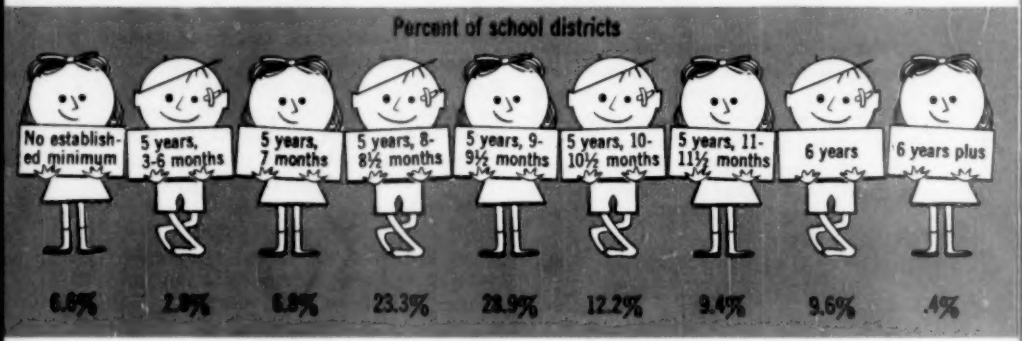
Those systems which do make exceptions to the rule report that their decisions are usually based on psychological tests of intelligence, maturity, and social development.

Transfers of pupils from one community to another are so numerous as to require special policies of administration. When a child who has already been attending school in another district (where the minimum age for entrance was lower) seeks to enter school in a system under whose rules he is underage, his application is handled in one of a number of ways.

Under-age children are not accepted at all in about a fourth of the systems responding to the questionnaire. On the other hand, about 60 percent of the respondents accept such a child—some of them in the case of admission to grade 1, others in kindergarten as well. Many base the admission on some such criterion as the results of a testing program, a trial period in the class, or the length of time already spent in the previous school.

The remaining districts either made no reply to the question on their policy, or indicated that they have no fixed

1 MINIMUM AGE FOR ADMISSION TO FIRST GRADE



policy and decide each case on an individual basis.

CHANGES IN POLICY

Although no general conclusions could be drawn as to trends in the matter of admission age, it was found that a small segment of the respondents reported that some change in their policy was either being put into effect or was being considered for future application. In most cases the changes described would result in a higher minimum age than presently required.

Some of the respondents indicated that age is at best an inadequate criterion, due to the differences between one child and another. It was believed that if admission is not based, as would be preferable, on indications of mental and social maturity, it would be advisable to admit children at a later age, when more of them could be expected to be ready to perform the learning tasks involved.

PROMOTION POLICIES

Whereas a previous survey revealed that in 1937-38 only 27.4 percent of the cities over 100,000 in population had a policy of annual promotion in senior high school, the figure in 1957-58 had reached 78.2 percent. This included those who either have or are changing to annual promotion at all levels.

A semiannual promotion policy is still in effect in a very small segment of the school systems questioned. Most of the 3.7 percent reporting such a policy

in both elementary and secondary schools are in cities with populations of 100,000 or more.

The percents of representative urban school systems having the various promotion plans are as follows:

Plan	*Percent*
Annual promotion	86.5%
Semiannual in high school; annual in elementary school	6.2
Semiannual promotion	3.7
Changing to annual promotion	3.0
Other	0.6
Total	100.0%

UNGRADED PRIMARY PLANS

Although it has been widely discussed and advocated, the organization of the early elementary years into an ungraded primary unit has not achieved broad acceptance. Only nine systems, or about 2 percent, could be classified as having this type of structure in the lower grades in all the elementary schools.

Promotion out of the primary unit into grade 4 is generally based upon academic achievement, especially in reading, and the child's social maturity.

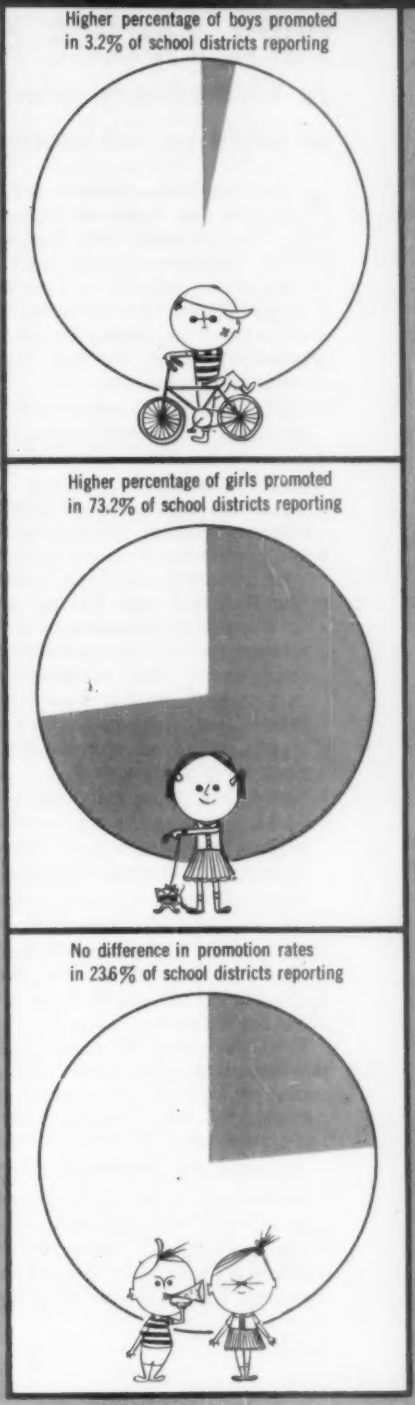
PROMOTION RATES

The usual rate of promotion was found to be rather uniformly high. Almost all the systems reported that more than 90 percent of the pupils in each of the first three grades are promoted at the end of each year. In many districts the rate of promotion is somewhat lower in grade 1 than in the other two grades.

About four-fifths of the respondents answered a question on differences, if any, between boys and girls in rate of promotion from grade 1 to grade 2. Of this group, 73.2 percent reported a higher rate for girls; 3.2 percent, a higher rate for boys; and 23.6 percent, no difference.

This result might be considered to support the recommendation of one authority that in view of the faster maturation rate of girls, either (a) different entrance ages should be established for boys and for girls, or (b) a greater percentage of boys should be retained in the first grade.

2 PROMOTION RATES FROM GRADE 1 TO GRADE 2


Higher percentage of boys promoted in 3.2% of school districts reporting
Higher percentage of girls promoted in 73.2% of school districts reporting
No difference in promotion rates in 23.6% of school districts reporting

PUPIL FAILURE AND NONPROMOTION

In elementary grades the rate is one-third as high as 50 years ago

ALTHOUGH some children still have to stay for a second year in the same school grade, this happens to fewer children than formerly. Research on the causes, effects, and prevention of pupil failures and nonpromotion have contributed to a change in promotion practices. Current thought may be summarized as follows:

- Since 1900 there has been a decrease in the rate of pupil failures leading to nonpromotion or repetition of a course of study.
- Threats of failure do not necessarily motivate children to work harder.
- Nonpromotion does not always increase mastery of subject matter.
- The fact that boys fail more often than girls, despite insignificant differences in scores on intelligence and achievement tests, indicates that promotion is based to some extent on factors other than academic achievement, such as deportment and neatness of written work.
- The failure of an individual pupil is usually caused by a number of factors, some beyond his control.

EXTENT OF NONPROMOTION

Although exact figures are difficult to obtain, it seems that the average rate of failure leading to nonpromotion in the elementary schools dropped from approximately 16 percent in 1909 to about 5 percent in 1949.

Early studies of the rate of failure in the secondary schools showed a range among schools from 2 percent to 80 percent; a recent study showed a range from 0.02 percent to 10.6 percent.

EFFECTS OF NONPROMOTION

Failure may be a usual and necessary part of adult life, and adults may develop a number of different ways to cope with it, but the continuous and disastrous failures that accompany some children throughout their school careers, with no acceptable escape from the situation, may have serious effects on the child's personality.

Symptoms of social and emotional maladjustment are more apparent among pupils who have experienced failure in school than among those who have not. One study showed that 40 percent of those required to repeat a grade wished to drop out of school, compared with 15 percent of the regularly promoted pupils.

Moreover, nonpromotion does not always achieve desired academic aims. Pupils threatened with failure did no better than those who were told that they would pass no matter what their achievement, according to one experiment. Another study showed that seventh- and eighth-grade pupils who were not promoted averaged no better a second time in the subjects they had failed. A quarter of these pupils did worse a second time in subjects they had passed the first time but were forced to repeat because of nonpromotion.

One study based on records covering a number of years showed that third-graders (in a number of different school systems) who were repeating the grade averaged only three months ahead of their achievement in grade 3 a full year earlier. An equal number of their classmates, who had matched them in test scores a year earlier, but had been promoted instead of being failed, had made six months' greater progress than those who failed. Although they did not fail again, the once-failed group was still behind the promoted group by the

For further details see: National Education Association, Research Division. *Pupil Failures and Nonpromotion.* Research Memo 1959-2. Single copy free.

time each reached the seventh grade although the failed group had taken a year longer to reach grade 7.

Another effect of nonpromotion, sometimes overlooked, is the added expense to the school district, in the case of the pupil who ultimately completes the school program. To the extent that nonpromotion may discourage the pupil and lead him to drop out of school as soon as possible, the total cost of his schooling may be no greater than if he had received continuous promotion.

CAUSES OF FAILURE AND NONPROMOTION

Over the years a number of causes of failure and reasons for nonpromotion have been given by administrators. One of the most prominent among the reasons given for repetition of a grade is irregular attendance.

There is evidence, however, that with adequate help a pupil can make up most of the work missed, even after prolonged absence; automatic nonpromotion merely because of absence is likely to be harmful rather than helpful to the pupil.

Emotional maladjustments, difficult home conditions, unnoticed physical defects, and low intelligence have been shown to affect the pupil's ability to learn. Low academic achievement is probably a result of one or more of these basic conditions and may be insufficient reason alone for nonpromotion in the modern school.

One study, comparing highly intelligent pupils who were failing two or more major subjects in high school with those who were failing none, revealed that experience of failure in the past may have adverse effects on present performance.

PREVENTION OF FAILURES

Efforts to solve the problem of pupil failures have attempted both to find ways of bringing children up to the required standards of achievement and to discover what a child can do, and then to suit the curriculum and teaching to his capacities. Children do not always make the progress of which they are capable, but schools do not always set the best possible goals for them either.

Both semiannual promotion and increased departmentalization have been considered means of making failure less serious. Semiannual promotions have been found cumbersome and unhelpful by many school systems and the trend is toward abandonment of them in favor of once-a-year promotion. Departmentalization may call for the repetition of only one subject rather than a whole grade, but the increased academic pressure that often accompanies it seems to show little concern for the prevention of failure.

One alternative to promotion based on either academic standards or on chronological age is the elimination of grade levels and the development of ungraded programs in which the pupil proceeds at his own best pace and repeats only the specific work that he needs and has not mastered; this system of classification is usually known as "continuous progress."

Ability grouping into separate classes of slow, average, and rapid learners may deprive the slow and average learner of valuable educational experiences, but there has been much support for flexible grouping within a classroom. The child can then work with different groups according to his abilities, needs, and interests and has a chance to improve his level of performance in a number of different ways and areas.

Many children profit from remedial teaching if it is begun early enough. A good guidance program in a school equipped to meet individual needs can show the child how to overcome his difficulties and use his abilities. It can remove him from situations in which he is likely to fail through no fault of his own.

The prevention of failure is costly, but no more costly than a system of nonpromotion in which both society and the individual lose every time a pupil must repeat a grade.

Administrators' Maximum Salaries

The gap between elementary- and secondary-school principals is narrowing

ADMINISTRATIVE salary schedules for 1958-59 have been received from 116 of the 160 urban school districts of 100,000 or more population. Maximum administrative salaries at the M. A. and at the highest level of preparation recognized in the schedule, and the provisions relating to them, are summarized in a report recently compiled by the NEA Research Division.

The 116 districts were divided into two population groups. In Group I, population 500,000 or more, 24 districts with administrative salary schedules reported. In Group II, population 100,000 to 499,999, 92 reported.

Among the findings of this study are these:

- Medians of the highest maximum salaries for elementary-school principals are $8225 in Group I districts and $8025 in Group II districts.
- For senior high-school principals, median maximums are $11,000 in Group I and $9930 in Group II.
- About five-sixths of the school districts in Groups I and II have salary schedules for principals based on grade levels, that is, higher salaries for secondary-school than for elementary-school administrators.
- The most common type of salary schedule for principals provides minimums, increments, and maximums that are independent of classroom teaching schedules; a substantial minority of districts, however, pay the principal on the classroom schedule, plus an administrative differential.
- Only about half of the administrative salary schedules for principals recognize preparation higher than the master's degree.
- In general, median salaries for all groups of administrators are lower in Group II districts than they are in Group I districts.

TYPES OF ADMINISTRATORS

The report distinguished between administrators in the individual schools and in the central administrative staff. Principals, assistant principals, counselors, deans, and heads of departments serve on the staffs of individual schools. They are more often on a schedule than are supervisors, consultants, coordinators, directors, and assistant superintendents.

Superintendents' salaries are usually set by short-term contract and are not included in a schedule, and hence were not available for analysis. Salaries actually paid these officials will be reported in a later phase of the Biennial Salary Survey for 1958-59.

GRADE-LEVEL DISTINCTIONS

Fullest coverage in this report was given to salaries of principals. Single-salary schedules for elementary-school and high-school principals are still rare. In only 13.0 percent of the Group I schedules and 15.0 percent of the Group II schedules did the salaries and lengths of the working year for principals in all schools of similar size appear to be the same for both elementary and secondary schools.

Principals' salary schedules differentiated *three* grade levels—elementary school, junior high school, and senior high school—in 60.9 percent of the Group I districts and in 51.2 percent of the Group II districts. *Two* grade levels—one for elementary schools and

For further details see: National Education Association, Research Division. *Salary Schedule Maximums for School Administrators, 1958-59, Urban Districts 100,000 and Over in Population.* Research Report 1958-R4. Washington, D. C.: the Association, November 1958. 48 p. 25¢.

only one for secondary schools—were recognized in 26.1 percent of the Group I schedules and in 33.8 percent of the Group II schedules.

In some districts, elementary-school principals are paid the same monthly rates as secondary-school principals but are employed for fewer months; these districts were considered to have schedules based on grade levels.

The districts that maintain only elementary or only secondary schools are excluded from the percents given above.

School principals are often paid on a schedule according to the size of the school (number of pupils or number of teachers) that they supervise, whether or not there is a salary differentiation based on grade level. In single-salary schedules there are always differences in salary according to size of school. The largest elementary school is almost always much smaller than the largest secondary school in a district and hence will carry a smaller salary, even where there is a single-salary schedule for principals.

1 MEDIANS OF MAXIMUM SALARIES SCHEDULED FOR PRINCIPALS

Position and training level	Medians of maximum salaries	
	GROUP I	GROUP II
Elementary-school principals		
With M.A.	$9,327	$8,442
Highest level recognized	9,502	8,700
Junior high-school principals		
With M.A.	9,800	8,900
Highest level recognized	10,001	9,210
Senior high-school principals		
With M.A.	10,700	9,765
Highest level recognized	11,000	9,930

Since about five-sixths of the school districts have schedules based on grade levels and since differentials based on time and size work in favor of the secondary schools, higher salaries for secondary-school principals are to be expected. Table 1 shows that the medians of scheduled maximums for senior high-school principals are about 15 percent above those for elementary-school principals.

Five years ago the salary relationships between elementary-school and high-school principals in these school systems were about the same as in 1958-59. Early studies by the Research Division, however, show that in the past 30 years there has been a striking change in the status of the elementary-school principal relative to that of the high-school principal.

In 1928-29 the median of maximum salaries for high-school principals in cities over 100,000 in population was 36 percent higher than the median for elementary-school principals. This narrowing of the differential from 36 percent to 15 percent is striking. The change may be due in part to the increase in size of elementary schools and to the raising of professional standards for principals of elementary schools.

LEVELS OF PREPARATION

In about half the schedules the "highest level of preparation recognized" is the master's degree. Preparation beyond the M.A. degree is recognized for elementary-school principals in 45.8 percent of the Group I schedules; for junior high-school principals, in 47.6 percent; and for senior high-school principals, in 45.8 percent. In Group II the corresponding percents were somewhat higher, 58.0, 60.9, and 54.1 respectively.

The medians of principals' maximum salaries for the *highest level* of preparation include both the schedules that stop with the master's degree and also those that recognize preparation beyond the master's. As Table 1 shows, the medians thus tabulated are only slightly higher, usually less than $300, than the

medians tabulated for the M.A. degree for all districts.

The salary shown for highest preparation recognized is significant in that it shows the top maximum attainable by administrators who have met the highest standards in preparation and experience recognized by the school districts concerned. Only for secondary-school principals in the largest cities do the medians reach $10,000. These salaries are indeed low for persons responsible for professional leadership for large groups of teachers.

INDEPENDENT SCHEDULES VS. DIFFERENTIALS

For many years the typical practice was for the administrative schedule to be completely *independent* of the classroom teachers' schedule; that is, the minimum salaries, the increments, and the maximum salaries of administrators were stated separately from those of classroom teachers, and changes could be made in either schedule without direct effect on the other.

In recent years the practice has appeared of building the administrative schedule on that of classroom teachers by adding *differentials*. By this plan, part of the administrator's salary is the same amount he would earn as a classroom teacher; the remainder is a differential to recognize the responsibilities, and in some cases the longer working year, of the administrator.

These differentials may be either "dollar" differentials, or "ratio" differentials. With dollar differentials the administrator receives fixed sums of money above what he would receive as a teacher.

In an administrative schedule with a ratio differential, the amount of salary due the administrator is stated as a percentage above the salary the principal would receive on the schedule for classroom teachers. For example, the schedule may fix a maximum ratio of 1.40 for the elementary-school principal. In order to determine the principal's maximum salary, the maximum salary of a classroom teacher at his level of preparation and experience—say $7000—is multiplied by 1.40. The resulting amount for the principal would be $9800.

The *independent* schedules almost without exception provide increments based on administrative experience. The schedules based on *differentials*, however, often neglect this factor. The principal or other member of the administrative staff is likely to have reached the maximum step on the classroom teachers' schedule before being appointed administrator. Without a scale for administrative experience, he reaches his administrative maximum in his first year.

For principals, information as to the use of independent vs. differential schedules was recorded. Independent schedules for principals are in the majority, representing 87.5 percent of the Group I districts and 54.4 of those in Group II. In 12.5 percent of the Group I schedules dollar differentials are used; they also appear in 23.9 percent of the Group II schedules. None of the Group I schedules is based on ratio differentials, but 21.7 percent are in Group II.

PERCENTAGE COMPARISONS

Since figures on percentage comparisons of administrative maximums with classroom-teacher maximums are frequently requested by both classroom teachers and administrators, percents were calculated for all administrative maximums given in this report.

The median relationships between maximum salaries of classroom teachers and school principals, at both the M.A. degree and the highest level of preparation recognized, and at the three grade levels, are shown in Table 2.

In many schedules the added salary given administrators to recognize advanced study is *relatively* less than the added salary given teachers for the same advanced study. The result is that comparisons of maximums show higher differentials for administrators when based on the M.A. level than on the highest level recognized.

2 RELATIONSHIPS BETWEEN MAXIMUM SALARIES OF PRINCIPALS AND OF CLASSROOM TEACHERS

Position	GROUP I		GROUP II	
	With M.A. degree	Highest level recognized	With M.A. degree	Highest level recognized
Classroom teachers	1.00	1.00	1.00	1.00
Elementary-school principals	1.40	1.35	1.31	1.30
Junior high-school principals	1.45	1.43	1.38	1.37
Senior high-school principals	1.60	1.54	1.52	1.50

The higher percents of differentials for principals in Group I than in Group II schedules recognize the larger average size of schools in the largest cities.

LENGTH OF THE WORKING YEAR

An attempt was made to group salaries according to the length of the working year that they represented. With only 24 schedules in Group I, the numbers were so small when spread out among the different lengths of the working year that the figures were not meaningful. For Group II the numbers were larger and some relationships could be seen.

Table 3 shows the medians of maximum salaries for principals in Group II districts according to three lengths of the working year. It may be noted that whatever the grouping by length of working year, principals' salaries average lowest in elementary schools, highest in senior high schools.

Relatively few schedules show 12-month salaries for elementary-school principals. Twelve months of employment was reported for only 11 percent of the 81 schedules giving the working year for elementary-school principals. Of the 79 schedules giving the working year for senior high-school principals, 41.8 percent indicated 12 months of employment.

SALARIES OF OTHER ADMINISTRATORS

Counselors, deans, and department heads usually serve as members of individual high-school staffs. When medians of maximums for these positions are

3 MEDIAN MAXIMUM SALARIES OF PRINCIPALS WITH HIGHEST LEVEL OF PREPARATION RECOGNIZED, ACCORDING TO LENGTH OF WORKING YEAR —GROUP II, DISTRICTS 100,000-499,999 IN POPULATION

Item	10 months or less	Over 10, less than 12 months	12 months
Percent of schedules reporting each length of school year			
Elementary schools	66.7%	22.2%	11.1%
Junior high schools	42.2	32.8	25.0
Senior high schools	25.3	32.9	41.8
Median of maximum salaries			
Elementary schools	$8,600	$8,668	$10,300
Junior high schools	9,204	9,234	9,900
Senior high schools	9,720	9,850	11,229

4 MEDIANS OF MAXIMUM SALARIES SCHEDULED FOR CERTAIN ADMINISTRATORS, WITH HIGHEST LEVEL OF PREPARATION RECOGNIZED

Position	GROUP I		GROUP II	
	Number of schedules	Median	Number of schedules	Median
Classroom teachers	25	$7,200	110	$7,000
Elementary school				
Supervising principals	24	$9,502	88	$8,700
Head teachers and teaching principals	8	7,638	24	7,310
Assistant principals	16	8,225	28	8,025
Junior high school				
Principals	21	10,001	69	9,210
Assistant principals	16	8,525	43	8,458
Senior high school				
Principals	24	11,000	85	9,930
Assistant principals	22	8,940	74	8,989
Heads of departments	7	8,150	26	8,280
Counselors	11	7,800	27	7,875
Deans	6	7,350	17	7,915

5 MEDIAN MAXIMUM SALARIES SCHEDULED FOR CENTRAL-STAFF ADMINISTRATORS, WITH HIGHEST LEVEL OF PREPARATION RECOGNIZED

Position	GROUP I		GROUP II	
	Number of schedules	Median	Number of schedules	Median
Supervisors	19	$9,600	58	$9,000
Consultants	5	7,800	21	9,128
Co-ordinators	7	10,020	27	9,656
Directors	22	11,788	55	10,800
Assistant superintendents	20	15,600	27	14,000

compared, the rank in Group I schedules is (1) department heads, (2) counselors, and (3) deans. In Group II schedules, however, the salary maximums differ only slightly among the three positions. These positions, shown in Table 4 for both population groups, have median maximums lower than those of elementary-school principals and secondary-school assistant principals.

Members of the central administrative staff are less likely to be on a schedule than the administrators in the individual schools. As with the principals' salaries, however, in those districts that do include central office staff on the schedule, salaries are likely to be lower in Group II than in Group I. Medians for the various central staff positions and the number of schedules including each position are given in Table 5.

Caution should be exercised in basing generalizations on the relationships among these medians of maximum administrative salaries. Among the school districts these positions may be differently defined and the scope of responsibility differently delineated. The differences among districts in the duties carried by the administrative personnel cannot be reflected in an analysis of schedules.

OCCUPATIONAL TRENDS

Women teachers are no longer the majority of all women professional workers

SCIENCE and mathematics as basic elements in education for understanding the modern world are clearly essential. But the growing idea that advanced science and mathematics are a key to economic security for the mass of individual workers is not borne out by occupational trends.

Much of the discussion of the past years might lead the layman to believe that the overwhelming balance of jobs in our economy will soon lie in the technical uses of mathematics and science. But Census figures show that this is not the case, nor does it promise to be in the future.

Trends since 1900 show that America is still a land of occupational diversity and occupational change. The trends unquestionably have been in the direction of greater need for technical skills. If the schools are to perform their function of providing curriculums geared to the needs of all the people, however, the needs of the great majority of pupils who will not require advanced mathematics or science in their vocations must be recognized.

These are among the changes in the occupational pattern, summarized in the table:

- There has been a consistent upgrading of jobs; the percent of workers in occupations requiring advanced skills and education is steadily rising.
- The nation has shifted dramatically from a preponderantly rural to a concentrated urban economy, with a projection for 1975 showing only about 5 percent of the labor force on farms.
- The percent of professional, technical, and kindred workers doubled from 1900 to 1950, but in 1950 this group represented only 8.6 percent of all workers. By 1975 the proportion may reach 14.0 percent.
- Manual and service workers have represented about half of the working force in past years and apparently will continue to do so.
- Industrial and farm laborers—often unschooled and unskilled—represented 30.2 percent of the working force in 1900, but only 11.0 percent in 1950. The percent will probably continue to shrink.

Increasing use of the products of scientific technology clearly calls for a higher degree of education and technical skill in every line of work than was required in 1900. There is less and less demand for the services of unskilled laborers, once recruited in large numbers from youth who dropped out of school at an early age. Such children and youth are now staying in school longer. When they leave, they are better equipped than their counterparts of 50 years ago to find employment in manual and service occupations which require some degree of vocational skill.

College graduation is being increasingly recognized as valuable, both individually and economically, to the average young American, whatever his occupation. Of the occupational categories shown in the table, however, only the first two can be said typically to require college graduation as a condition for employment. And many in these professional-technical and managerial groups are semiprofessional workers, such as draftsmen, photographers, and entertainers, who do not have to be college graduates. Making no allowances for these exceptions, however, only 17.3 percent of the 1950 workers were in the

For details see: Kaplan, David L., and Casey, M. Claire. *Occupational Trends in the United States, 1900 to 1950.* Working Paper No. 5. Washington, D. C.: U. S. Department of Commerce, Bureau of the Census, 1958. 29 p.

1 TRENDS IN OCCUPATIONAL DISTRIBUTION, 1900 TO 1975

Occupation	1900	1950	1965	1975
WHITE-COLLAR WORKERS	17.6%	36.6%	42.5%	46.6%
Professional, technical, and kindred workers	4.3	8.6	11.3	14.0
Managers, officials, proprietors	5.8	8.7	10.3	10.8
Clerical workers	3.0	12.3	14.4	14.4
Sales workers	4.5	7.0	6.5	7.4
MANUAL AND SERVICE WORKERS	44.9	51.6	49.9	48.0
Craftsmen, foremen	10.5	14.1	13.5	13.7
Operatives	12.8	20.4	19.6	17.5
Industrial laborers	12.5	6.6	5.0	4.4
Service workers	9.0	10.5	11.8	12.4
FARM WORKERS	37.5	11.8	7.6	5.3
Farmers and farm managers	19.9	7.4	7.6	5.3
Farm laborers	17.7	4.4		
Total	100.0%	100.0%	100.0%	100.0%
Numbers of workers, in thousands	29,030	58,999	73,500	86,900

Source:

Data for 1900 and 1950 from: Kaplan, David L., and Casey, M. Claire. *Occupational Trends in the United States, 1900 to 1950.* Working Paper No. 5. Washington, D. C.: U. S. Department of Commerce, Bureau of the Census, 1958. Table 1, p. 6, and Table 2, p. 7. Data for 1965 and 1975 derived from unpublished data supplied by the Bureau of Labor Statistics, September 12, 1958. Totals may not add to 100.0 percent because of rounding of percents for specific items.

professional-technical and managerial groups. By 1975 this total may reach nearly 25.0 percent.

Not shown in the illustration are figures on numbers of teachers. In the 50 years preceding 1950, teachers as a unit in the labor force increased in numbers but became a smaller segment of the professional-technical group than in 1900. The changes were as follows:

	1900	*1950*
Men teachers as a percent of male professional-technical workers	13.8%	9.5%
Women teachers as a percent of female professional-technical workers	74.8	42.7
All teachers as a percent of all professional-technical workers	35.3	22.6

Particularly among women, teaching has ceased to be the almost exclusive outlet for professional service. Large proportions of women college graduates continue to enter teaching, but the competition of other professional occupations is constantly growing.

CONCLUSION

An increasingly complex, pluralistic society will require the services of workers in diverse occupational fields. Educational objectives which overemphasize specific occupations could create at a later date an oversupply in some occupational areas. Short-range requirements may not be consistent with long-term needs. The growing educational attainment of the population further complicates adjustment to the present and projected occupational distribution of the labor force.

A Background for Public Debate

The American people are confronted with a major decision on the future of education

IN 1959 about 45,000 local communities, most of the state legislatures, and the Congress of the United States will debate and decide how much money will be spent on public education during the next fiscal period. Their decisions will be tempered by information, opinions, and prejudices concerning this important fiscal problem. Their decisions will have a long-range effect on America's resources, both human and economic.

Citizens groups and individuals who have studied the problems of school finance objectively have provided a background for the fiscal decisions affecting education. These studies have dealt largely with four basic questions:

- How important is education?
- Is education adequately financed in the United States?
- What will be the cost of the education we need?
- Can we afford the education we need?

Basic ideas on these four questions, from some 20 studies by citizens groups, meeting on their own initiative or at the request of the President of the United States, are summarized in the paragraphs that follow.

HOW IMPORTANT IS EDUCATION?

Here the basic question has been answered by citizens groups in terms of the kind of economy, the kind of nation, and the kind of world we are living in today.

Ours is the kind of civilization and we live in the kind of world which requires a lot of education—more in amount and better in quality for a rising number and portion of our people. Education has been of great importance to the progress of the United States in the past. Present conditions underline its growing importance:

- The demand for highly trained manpower is mounting.
- Educational institutions are the principal source of basic research.
- The public schools are the primary source of an enlightened citizenry.

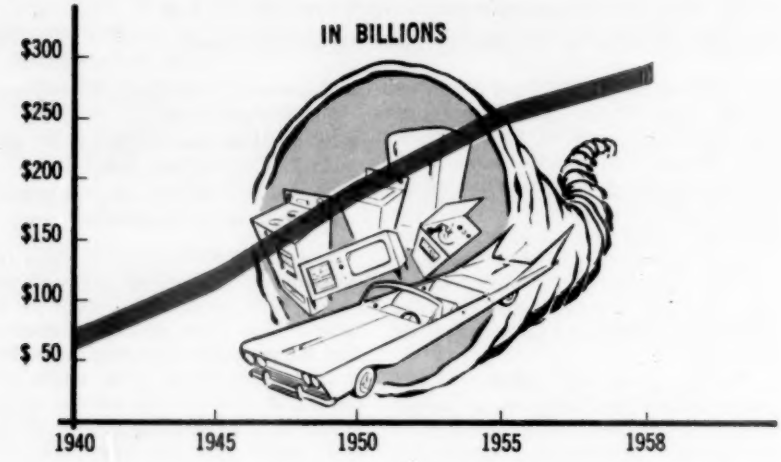
In general, states which have a tradition of maintaining good public schools, costing well above the average for the nation, have high per-capita incomes. This happens even though some of these states are endowed with limited resources of minerals and soil and with a relatively short growing season. On the other hand, there are states with comparatively rich natural resources. But with a tradition of financing their schools at relatively low levels, these states rank low in productivity per person.

The same observation holds among the nations of the world. It is debatable whether a high educational effort is the cause or effect of a high national income. But it is well established that among nations of the world high national incomes and high educational efforts are found together. Indeed, a stepping up of educational efforts is one indication that a nation may be bidding for a higher position among the industrial nations of the world. Russia, Japan, and now Mexico are cases in point.

The pervasive effects of education are felt throughout the economy. Industry prospers in a stable political regime as opposed to an unstable one. It prospers when managed by entrepreneurs with general and technical background, supported by basic research.

This article is based on a report prepared by John K. Norton for the NEA Committee on Tax Education and School Finance: *Citizens Speak Out on School Costs.* Washington, D. C.: the Association, 1959.

1 PERSONAL CONSUMPTION EXPENDITURES, 1940 THROUGH 1958



It prospers through wise combination of the skills of labor and accumulated wealth.

Educated people produce more, earn more, buy more, read more, and vote more than their fellow citizens with less education. The relation between education on one hand and the economic and social contribution of people on the other has long been recognized.

Although many other nations of the world are comparably rich in material resources, the United States occupies the foremost position of leadership in the world. Our economy is the wealthiest. Our ideals are the most humane. Our people are the best educated. Much of our growth is attributed to our early progress in providing universal free education.

Our nearest competitor in world leadership is moving up fast—propelled largely by an intensive effort in public education.

Our material well-being and further fulfillment of our democratic ideals, our national security and maintenance of our position of world leadership—all require more and better education. Such are the considerations which emphasize the great and mounting importance of education in the United States.

IS EDUCATION ADEQUATELY FINANCED?

Fair-minded citizens agree that education should be one of the priorities in the American scheme of things. Accordingly, it is essential that this great enterprise be well enough financed so that it may fully discharge its important responsibilities.

This question has been dealt with from several approaches. Representative citizens commissions have studied it from the viewpoint of national needs. Other studies have explored the adequacy of state and local school budgets. The test of adequacy would seem to be whether in the nation as a whole and in the individual states and localities sufficient support is available to provide acceptable schooling for all and advanced education for those of special ability.

Adequacy of financial support of American education has been viewed in terms of the amount and quality of education we need for our young citizens. The conclusions reached by study groups are not divorced from the political philosophies held by the participants and their sponsors.

- Where the political philosophy of a study group makes it hostile to education for all except the elite by reasons of birth or intellectual endowment, the support for universal free education in any amount appears adequate and even generous.
- Where the political philosophy is subordinated to pressures for keeping educational costs within limits which are set by painless extraction of funds from obsolete state and local revenue structures, the educational effort appears to be the best possible.
- When citizens measure the financial support of education in terms of what it is necessary to do that the nation may survive and flourish, the present level of financial support emerges as "much too little."

2 PER-CAPITA DISPOSABLE INCOME, 1940 AND 1957

It is obvious that a considerable percentage of the schools are financed at levels that are totally inadequate to provide the education America needs to survive and flourish. They maintain short terms, employ poorly prepared teachers, lack textbooks and other instructional materials, and suffer from a shortage of modern classrooms and equipment.

It is not only the poverty-stricken localities which shortchange their children. Shortage has been a key word affecting a majority of school systems. The level of school support in the United States adds up to a number of educational liabilities of serious national concern:

- "A squandering of our human resource capital"—1 in 9 young men screened for military service in World War II was illiterate—total or borderline.
- The virus of ignorance spreads across the nation through population mobility. One state inherits another's educational deficiency.
- The waste of top talent is acute—fewer than half of the best 25 percent of all high-school graduates now graduate from college.

The American people are confronted with a major decision. They can continue to finance education at a subsistence level and take the consequences, or they can place education on a firm financial basis and realize the benefits.

Every effort should be made to increase local and state support for schools. Basic studies in recent years have caused many citizens groups to recommend reforms in state and local tax structures and, in addition, substantial programs of federal support for education.

WHAT WILL BE THE COST OF THE EDUCATION WE NEED?

Every community, every state, and the nation as a whole must deal with the question of adequate school support if the gap between the amount and quality of education needed and the financial support is to be closed. Just what the cost will be depends on the following factors:

- The continuing rise in enrollments
- The need to finance an adequate number of teachers at salaries high enough to attract and hold a full staff of qualified teachers
- The need for counseling and guidance personnel so that bright children as well as the rank and file may fully capitalize their talents
- The need for adequate libraries, facilities, sufficient textbooks, and other instructional materials and equipment
- The need for classrooms in adequate number and designed to implement a modern school program
- The need to lift poverty-stricken school districts to a respectable level of support.

Citizens commissions which have wrestled with this question are in agreement that there must be substantial increases in the financial support of education—a breakthrough in educational support—if the United States is to have the kind of education essential for survival and progress.

Various bases for estimating the future cost of education produce about the same results. Within the next 10 years costs are expected to double or more than double. In recent years the annual addition of about a million pupils has kept school districts running hard (and mostly behind) with the provision of classrooms and teachers.

The action which each community and state will need to take to estimate the cost of closing the gap between needs and available funds for adequate educational services will vary.

Boards of education seldom assess the cost of providing the educational services the community really needs. Annual estimates of cost, the budgets for the next year, are confined to patched accounts of actual expenditures for the current year. Amounts added for the next year are geared mostly to providing in quantity for the additional pupils expected. The provision for additional quality runs a poor second.

The preparation of a desirable budget—what it would cost to give every pupil a first-rate school opportunity—by each school board across the nation would be a start toward national assessment of our school deficit.

CAN WE AFFORD THE EDUCATION WE NEED?

The citizens commissions which have come to grips with this question agree that we can afford the education we need.

The shortage of funds for adequate educational services is not so much a shortage of resources. By any standards America's economy is opulent. Basically the problem lies in the allocation of resources between the public and private sectors of the economy.

There is considerable evidence that education and many other public services face budgetary limitations far too stringent in view of the social and economic impact of their services. Our economic growth has been delayed and our national security threatened through failure to invest adequately in those public services which develop and conserve human talent—the ultimate source of all gains in productivity.

A corps of our ablest citizens is engaged in one of America's fastest growing enterprises—the cultivation of the consumers' desire for merchantable products. Every means of persuasion is

employed—visual, oral, even subliminal. The effort to encourage adequate expenditures for productive public enterprises is left to the chance that a citizen, a civic organization, or a courageous public official will speak out and be heard.

Our material resources are divided between the public and private sectors of the economy with taxation and public spending policies fixing the share of the public sector. Public education (as well as other tax-supported activities) is in the public sector of the economy—not because it is socialistic, needs to be curbed, or warrants only minimum support. Education is a government function because it is essential to national progress and security and because the provision of universal free education is outside the scope of competitive enterprise.

It is true that adequate expenditures for education require "the sacrifices of other desirable uses of output." Raising taxes is always a painful process. The dollar spent for taxes adds nothing immediately to the taxpayers' growing inventory of personal or household effects. But increases in government expenditures, including education, have not as yet required reductions in private expenditure.

Since the year 1940, expenditures in the government sector of the gross national product account have soared from $74.1 billion to $93.3 billion in the third quarter of 1958. For the same period personal consumption expenditures have increased from $71.9 billion to $284.4 billion. (See Illustration 1.) Per-capita disposable income (after taxes) has increased from $576 in 1940 to $1782 in 1957 (Illustration 2). After subtractions are made for increases chargeable to inflation, per-capita income after taxes has increased from $1156 in 1940 to $1782 in 1957 (in 1957 prices), an increase of 51.2 percent. On a per-capita basis and in dollars of constant purchasing power, the average American has 51.2 percent more money, after personal taxes are paid, for personal expenditures or investments.

Investigations of the supposed limits of the economy's ability to support rises in the governmental sector have concluded that the limits presently discernable lay not in ability but in willingness. The issue then becomes one of values. The economy can provide tax dollars in adequate amounts to finance public education commensurate with the national need for this service.

A lot of tax reform and shifting of the burden from the local to the state and from the state to the national level is indicated for equitable distribution of the mounting cost. The importance of education to the nation as a whole for security and for economic, political, and social growth underscores the financial stake of the federal government in the support of public education.

The citizens commissions which have dealt with America's need for education and the fiscal problems of public education agree that the present level of support is too low to provide the educational services national growth and security require. They also agree that America can afford good schools. The issue is one of educational vision and of willingness to match this vision with appropriate fiscal action. Furthermore, such action would be an investment paying handsome returns in individual satisfactions and national well-being.

RETIREMENT AND SOCIAL SECURITY

Some or all teachers in 33 states are now covered by social security

State-wide application of social security

Social security supplements existing retirement system; no modification for adjustment to social security	Alabama, 1955 Arizona, 1953 Idaho, 1957 Iowa, 1957 Kansas, 1955 Maryland, 1956 Nebraska, 1955 Washington, 1957 Wyoming, 1953 West Virginia, 1956
Social security supplements retirement system, which has been modified to adjust to social security (co-ordination but not integration)	Indiana, 1955 Michigan, 1955 Mississippi, 1952 New Hampshire, 1957 North Carolina, 1955 Oregon, 1953 South Carolina, 1955 Virginia, 1952
Social security integrated with retirement system by offset methods	Delaware, 1953 New Jersey, 1955 Utah, 1953

Application of social security varying within the state

Social security adopted in some districts or counties; state-wide retirement system not affected	Georgia, 1956 Montana, 1955 North Dakota, 1956 Oklahoma, 1955-56 Texas, 1956
Supplementing or co-ordinating on divisional bases	Hawaii, 1957 Tennessee, 1957 Wisconsin, 1957 New York, 1957
Offset on divisional basis	Pennsylvania, 1957

Other types of social security coverage

Social security only	South Dakota
Members of certain local retirement systems covered by social security	Missouri
Some school employees covered	Alaska Virgin Islands

Research Reports

1958-R1 *Salaries Paid and Salary Practices in Universities, Colleges, and Junior Colleges, 1957-58.* Higher Education Series. May 1958. 55 p. $1.

1958-R2 *High Spots in State School Legislation Enacted January 1-August 1, 1958.* School Law Series. September 1958. 28 p. 25¢.

1958-R3 *Classroom Teacher Salary Schedules, 1958-59, Urban Districts 100,000 and Over in Population.* Public-School Salaries Series. October 1958. 28 p. 25¢.

1958-R4 *Salary Schedule Maximums for School Administrators, 1958-59, Urban Districts 100,000 and Over in Population.* Public-School Salaries Series. November 1958. 48 p. 25¢.

1958-R5 *State Minimum-Salary Laws and Goal Schedules for Teachers, 1958-59.* Public-School Salaries Series. December 1958. 45 p. 50¢.

1958-R6 *Estimates of School Statistics, 1958-59.* December 1958. 30 p. 25¢.

1959-R1 *Analysis of Salary Schedules, 1957-58.* Public-School Salaries Series. January 1959. 31 p. 25¢.

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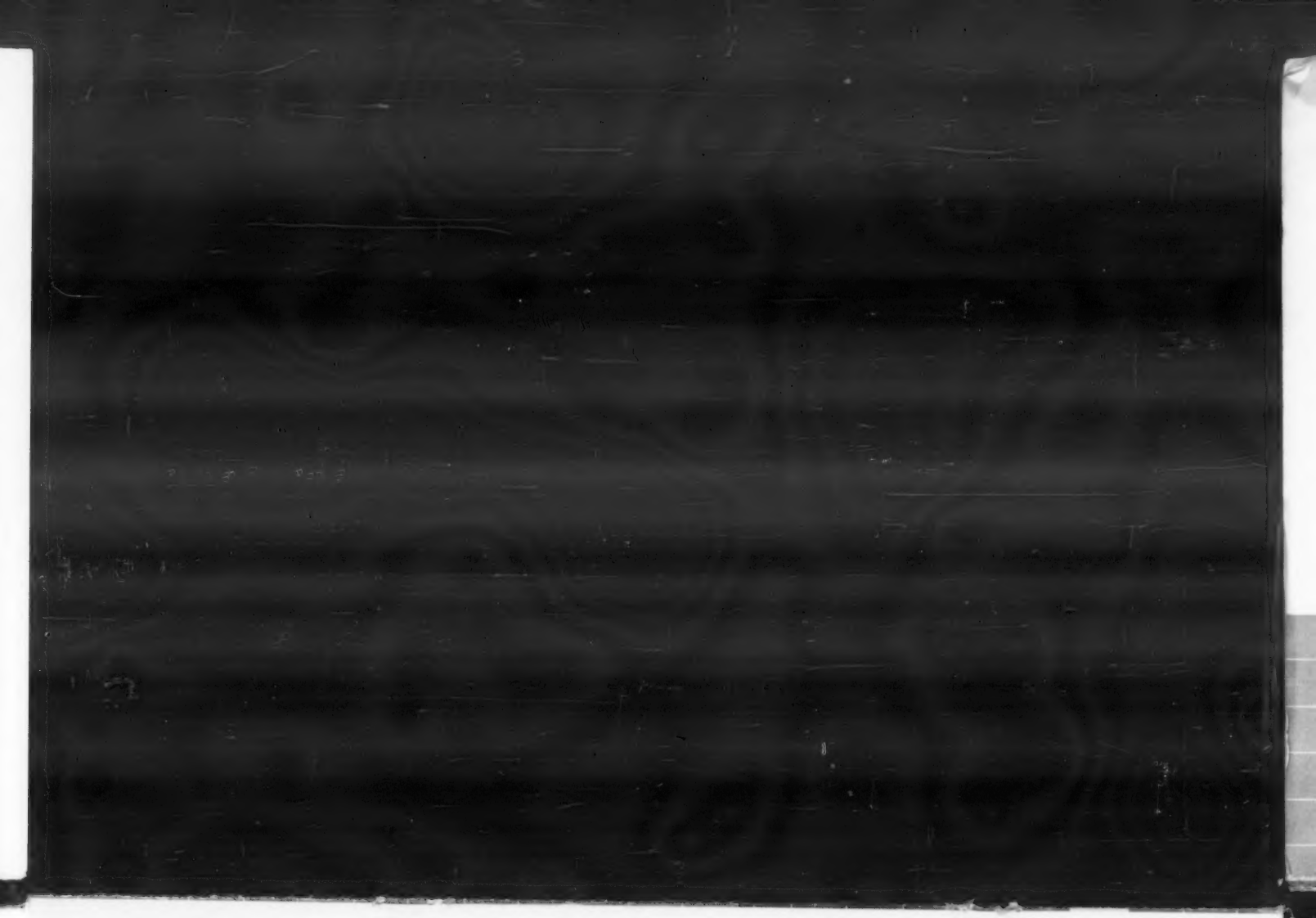
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